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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/784,614 | 02/23/2004 | Douglas Ray Sparks | IPF-19 | 8383 |
| 7590 | 11/15/2007 | | EXAMINER | |
| Douglas Ray Sparks, Ph.D. 391 Airport Industrial Dr. Ypsilanti, MI 48198 | | | VU, QUYNH-NHU HOANG | |
| | | ART UNIT | PAPER NUMBER | |
| | | 3763 | | |
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| | | 11/15/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|-----------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/784,614 | SPARKS ET AL. |
| | Examiner Quynh-Nhu H. Vu | Art Unit 3763 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 February 2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-37 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 23 February 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Specification

Claims 6 and 26 are objected to because of the following informalities: the limitation "the flow sensor is a coriolis mass flow sensor" does not support anywhere in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6 and 26 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation: "the flow sensor is a coriolis mass flow sensor" does not disclose anywhere in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9-21, 29-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Callan et al. (US 2004/0143225).

Callan discloses, (Figs. 1-2, 4-7), a device for delivery drugs, and it can be delivery an antidote comprising: more reservoirs 70, 80, 90; a sensor to monitor and control the delivery of the drugs ([0064, lines 21-24]); many valves (V1, V2, V3 or 50, 52, 54); a drug delivery path (catheter connection or syringe injector); an input signaling (see Fig. 2); the reservoir is pressurized by pump 100 or syringe (claim 9). The device path includes subcutaneous or manual injection by the user or medical personnel (claims 10, 12, 30); an input device, wherein the input device initiates the delivery of the drugs (claims 11, 31); it is inherently that the input device is manually activated by user; the input device is wirelessly activated ([0064 and 0067]) (claims 12-18, 32-33);

Regarding claims 34-37, the apparatus of Callan for use in a medical procedure. Ofcourse that, it can be used for performance enhancement system or survival system or emergency treatment system.

Claims 1, 4-5, 9-21, 24-25, 29-37 are rejected under 35 U.S.C. 102(e) as being anticipated by VanDiver et al. (US 7,044,933).

VanDiver discloses, (Figs. 1-6), a fluid injection (it can be used as antidote delivery) apparatus comprising: reservoir 24 or 129, a sensor 44 used to monitor and control the delivery of the drugs (col. 3, lines 45-55); valves 130 connected to the sensor and drugs reservoir (Fig. 5); an input signal/input device 22; the flow sensor is formed using micromachining techniques (it monitors such movement and generates the position signal, col. 4, lines 48-50); the reservoir is pressurized by spring loaded syringe, syringe pump motor (col. 4, lines 1-5); the input device

2 is manually activated by the user; the input device is wirelessly activated to the system (col. 3, line 23- col. 4, line 47)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callan et al. (US 2004/0143225) or VanDiver et al. (US 7,044,933)..

Regarding claims 2-4 and 22-24, Callan discloses the invention substantially as claimed. Callan does not disclose the type of drug to delivery such as in claims 2-3. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the chemical or biological agent as listed in claims 2-3, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Regarding claims 5-8, 25-28, Callan discloses the invention substantially as claimed. Callan does not disclose the type of corilis mass flow sensor or micromachined valves. However, it would have been obvious because a particular known device/technique was recognized as part of the ordinary capabilities of one skilled in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh-Nhu H. Vu whose telephone number is 571-272-3228. The examiner can normally be reached on 6:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quynh-Nhu H. Vu
Examiner
Art Unit 3763



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